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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/963,671	09/27/2001	Lisa Denney	1875.1410000	8981

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EXAMINER

CHOWDHURY, SUMAIYA A

ART UNIT	PAPER NUMBER
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2623

DATE MAILED: 07/26/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

<b>Office Action Summary</b>	<b>Application No.</b> 09/963,671	<b>Applicant(s)</b> DENNEY ET AL.	
	<b>Examiner</b> Sumaiya A. Chowdhury	<b>Art Unit</b> 2623	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

#### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

#### Status

- 1) ☒ Responsive to communication(s) filed on 15 June 2006.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

#### Disposition of Claims

- 4) ☒ Claim(s) 14 and 18-21 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 14 and 18-21 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

#### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

#### Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
  - ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

#### Attachment(s)

- |  |   |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)  | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)                                   | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152)             |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)<br>Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____  |

**DETAILED ACTION**

***Response to Arguments***

1. Applicant's arguments with respect to claims 14, and 18-21 have been considered but are moot in view of the new ground(s) of rejection.

***Claim Rejections - 35 USC § 103***

2. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.
3. Claims 14, and 18-21, are rejected under 35 U.S.C. 103(a) as being unpatentable over Burroughs in view of Hebsgaard (WO 01/17167).

As for claim 14, Burroughs teaches a system for associating a plurality of upstream channels with a plurality of downstream channels, all of said upstream channels and downstream channels operating on a communications device, comprising:

(a) a media access controller (Burroughs cable modem is DOCSIS compliant; it is inherent for a DOCSIS modem to have a media access controller), including:

a filter for receiving a bandwidth allocation message from a first communication device or a second communication device, wherein said filter processes authorization instructions to authenticate said bandwidth allocation message and a parse processor for formatting said bandwidth allocation message for designated upstream channel in

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response to said configuration signal being authenticated and at least one upstream signal receiver, wherein said bandwidth allocation memory is operable to forward said bandwidth allocation message to the upstream signal receiver that is operable to utilize said bandwidth allocation message to anticipate the arrival of an upstream signal - (Burroughs discloses a data-over-cable system comprising various CMTS stations, which communicate with each other via a bidirectional path (therefore, at any given time, any CMTS can be downstream from another.) In the event that one CMTS fails, another backup CMTS will takeover communications. The necessary synchronization data (i.e., bandwidth allocation message, upstream channel description, etc.) is sent from the failing CMTS (which could be downstream) or a cable modem (which could also be downstream). Once received by the backup CMTS, each system component (CMTS and modem) will perform checks on the other (i.e., authenticate bandwidth allocation message) – including MAP checks. If the checks are successful, data transfer begins. (Abstract, paragraphs [0007, 0009, 0025, 0028, 0029, 0031, 0033, 0034 & 0038]). Moreover, it is inherent the MAP message be used to predict the arrival of data. In any data-over-cable system, the cable modem must communicate some form of bandwidth request during initialization procedures, thus the CMTS must have some form of filter to receive said request. During this process, the modem will be authenticated and an upstream channel will be designated. Moreover, when the CMTS receives bandwidth requests from various modems, it must store those in order to facilitate data transfer. In order to accurately store those requests, it must first decipher

the data into components that can be analyzed (i.e., parsed). Accordingly, Burroughs anticipates all these limitations.)

(b) a bandwidth allocation memory for selecting and/or storing said bandwidth allocation message from said parse processor (When the CMTS receives bandwidth requests from various modems, it must store those in order to facilitate data transfer. In order to accurately store those requests, it must first decipher the data into components that can be analyzed (i.e. parsed). Accordingly, Burroughs anticipates all this.); and

Burroughs discloses the use of a filter which receives the bandwidth allocation info from a downstream source (in order to receive the info transmitted on some radio frequency, it must have some form of filter). However, Burroughs fails to teach the system communicates over a slave interface.

In an analogous art, Hebsgaard discloses such a set up – (Abstract, Fig. 3, p. 4, line 26 – p. 5, line 11).

It would have been obvious to one of ordinary skill in the art at the time of applicant's invention to modify Burrough's invention to include wherein the system communicates over a slave interface, as taught by Hebsgaard, for the advantage of providing an efficient method of synchronizing various CMTS stations.

The limitations of Claim 18 are also inherent in light of the rejection of Claim 1. As previously discussed, during initialization procedures, bandwidth and upstream channels are allocated. Since any one CMTS can service multiple downstream modems, it is inherent the CMTS have some form of memory used to store each

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modems respective bandwidth allocation and upstream channel. Accordingly, Burroughs et al anticipate each and every limitation of Claim 18.

As for claim 19, Burroughs fails to teach wherein said authorization instructions includes an interface bit capable of being set to accept or reject a request from a source of said bandwidth allocation message.

In an analogous art, Hebsgaard teaches a system which transmits control bits which are used to determine if the time-stamp is valid – (p. 7, lines 35-39).

It would have been obvious to one of ordinary skill in the art at the time of applicant's invention to modify Burroughs's invention to include a system which transmits control bits which are used to determine if the time-stamp is valid, as taught by Hebsgaard, for the advantage of determining whether the transmitted MAP info is valid.

As to Claim 20, it is inherent the CMTS have some form of memory used to identify which CMTS is available as a backup. Moreover, since the system operates in real-time, whenever a CMTS fails, the parameters of the backup CMTS must be updated to mirror those of the failing CMTS. Accordingly, Burroughs et al anticipate each and every limitation of Claim 20.

As to Claim 21, it is inherent the CMTS and modem have a MAP extractor in order to decode the transmitted MAP. Accordingly, Burroughs et al anticipate each and every limitation of Claim 21.

### ***Conclusion***

Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than **SIX MONTHS** from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Sumaiya A. Chowdhury whose telephone number is (571) 272-8567. The examiner can normally be reached on Mon-Fri, 9-5:00.

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If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Chris Grant can be reached on (571) 272-7292. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

SAC



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